

10/589,768

STM-Structure Search

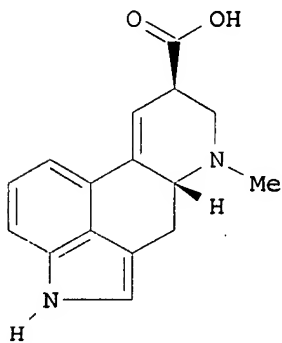
11/15/07

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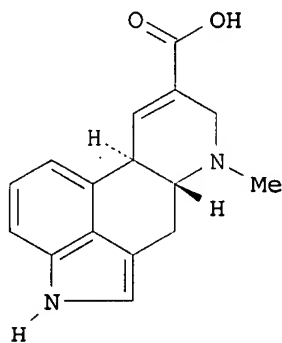
Inventor
 L5 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
 ACCESSION NUMBER: 2005:979652 CAPLUS
 DOCUMENT NUMBER: 143:248568
 TITLE: Process for the manufacture of lysergic acid
 INVENTOR(S): Cvak, Ladislav; Mojczek, Vlastislav
 PATENT ASSIGNEE(S): Ivax Corporation, USA; Ivax Pharmaceuticals S.R.O.
 SOURCE: PCT Int. Appl., 14 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005082902	A1	20050909	WO 2005-US4933	20050217
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2556774	A1	20050909	CA 2005-2556774	20050217
EP 1718644	A1	20061108	EP 2005-723159	20050217
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
CN 1956985	A	20070502	CN 2005-80012323	20050217
BR 2005006798	A	20070522	BR 2005-6798	20050217
JP 2007523171	T	20070816	JP 2006-554184	20050217
US 2007135638	A1	20070614	US 2006-589768	20060817
IN 2006DN05160	A	20070803	IN 2006-DN5160	20060908
KR 2007024490	A	20070302	KR 2006-718668	20060912
PRIORITY APPLN. INFO.:			US 2004-546559P	P 20040220
			WO 2005-US4933	W 20050217

OTHER SOURCE(S): CASREACT 143:248568
 GI



I



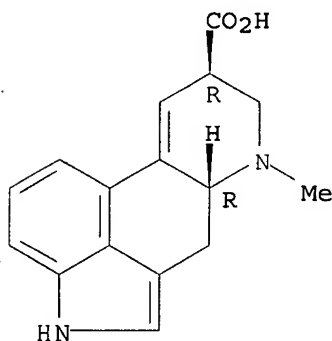
II

AB Lysergic acid (I) is formed in high yields and high quality by isomerizing paspalic acid (II) in a phase separated mixture formed by paspalic acid and a

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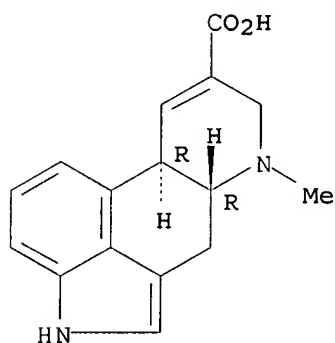
concentrated aqueous metal hydroxide solution
IT 82-58-6P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(process for the manufacture of lysergic acid via the isomerization of paspalic acid in a phase separated mixture formed by paspalic acid and a concentrated aqueous metal hydroxide soln)
RN 82-58-6 CAPLUS
CN Ergoline-8-carboxylic acid, 9,10-didehydro-6-methyl-, (8 β)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 5516-88-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(process for the manufacture of lysergic acid via the isomerization of paspalic acid in a phase separated mixture formed by paspalic acid and a concentrated aqueous metal hydroxide soln)
RN 5516-88-1 CAPLUS
CN Ergoline-8-carboxylic acid, 8,9-didehydro-6-methyl- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:31499 CAPLUS
DOCUMENT NUMBER: 134:86417
TITLE: Preparation of lysergic acid
INVENTOR(S): Gaullier, Jean-Claude
PATENT ASSIGNEE(S): Aventis Pharma S.A., Fr.
SOURCE: PCT Int. Appl., 11 pp.
CODEN: PIXXD2

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DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001002395	A1	20010111	WO 2000-FR1820	20000629
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2795728	A1	20010105	FR 1999-8538	19990702
FR 2795728	B1	20010907		
US 6242603	B1	20010605	US 2000-598425	20000621
CA 2376703	A1	20010111	CA 2000-2376703	20000629
EP 1196415	A1	20020417	EP 2000-949572	20000629
EP 1196415	B1	20030108		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AT 230743	T	20030115	AT 2000-949572	20000629
JP 2003503494	T	20030128	JP 2001-507832	20000629
ES 2185602	T3	20030501	ES 2000-949572	20000629
PRIORITY APPLN. INFO.:			FR 1999-8538	A 19990702
			US 1999-161430P	P 19991026
			WO 2000-FR1820	W 20000629

OTHER SOURCE(S): CASREACT 134:86417

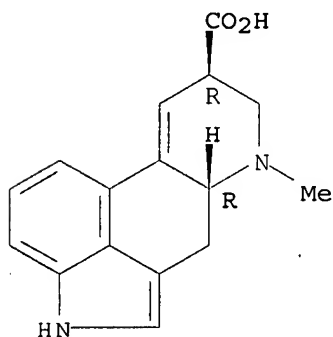
AB Lysergic acid was prepared by isomerization of paspalic acid using a tetraalkylammonium hydroxide. Thus, 130 g paspalic acid was treated with 780 g of a 40% aqueous soln of tetrabutylammonium hydroxide under N for 3.5 h followed by acidification with 95% sulfuric acid at pH 3.5 to give 107 g lysergic acid.

IT 82-58-6P, Lysergic acid
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
 (preparation of lysergic acid by isomerization of paspalic acid)

RN 82-58-6 CAPLUS

CN Ergoline-8-carboxylic acid, 9,10-didehydro-6-methyl-, (8 β)- (CA INDEX NAME)

Absolute stereochemistry: Rotation (+).



IT 5516-88-1, Paspalic acid
 RL: RCT (Reactant); RACT (Reactant or reagent)

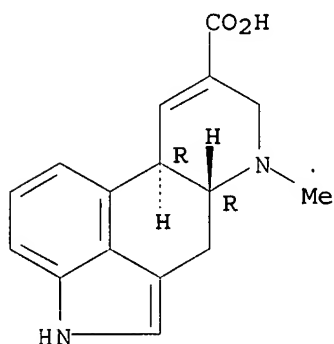
10/589,768

(preparation of lysergic acid by isomerization of paspalic acid)

RN 5516-88-1 CAPLUS

CN Ergoline-8-carboxylic acid, 8,9-didehydro-6-methyl- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 16:42:54 ON 15 NOV 2007)

FILE 'REGISTRY' ENTERED AT 16:43:11 ON 15 NOV 2007

E LYSERGIC ACID/CN

L1 1 S E3

E PASPALIC ACID/CN

L2 1 S E3

FILE 'CAPLUS' ENTERED AT 16:44:44 ON 15 NOV 2007

L3 104 S L1/PREP

L4 5 S L2/RCT

L5 2 S L3 AND L4

=> d l1

YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN

RN 82-58-6 REGISTRY

ED Entered STN: 16 Nov 1984

CN Ergoline-8-carboxylic acid, 9,10-didehydro-6-methyl-, (8 β)- (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ergoline-8 β -carboxylic acid, 9,10-didehydro-6-methyl- (8CI)

CN Indolo[4,3-fg]quinoline, ergoline-8-carboxylic acid deriv.

CN Lysergic acid (6CI)

OTHER NAMES:

CN (+)-Lysergic acid

CN D(+)-Lysergic acid

CN D-Lysergic acid

CN d-Lysergic acid

FS STEREOSEARCH

DR 4238-83-9, 345925-51-1, 409109-26-8, 607363-38-2

MF C16 H16 N2 O2

CI COM

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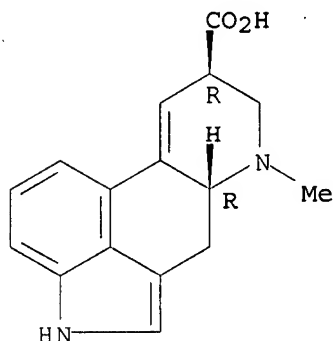
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHM, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT, PROMT, PS, SPECINFO, TOXCENTER, USPAT2, USPATFULL, USPATOLD

(*File contains numerically searchable property data)

Other Sources: EINECS**

(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

520 REFERENCES IN FILE CA (1907 TO DATE)

43 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

520 REFERENCES IN FILE CAPLUS (1907 TO DATE)

32 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN

RN 5516-88-1 REGISTRY

ED Entered STN: 16 Nov 1984

CN Ergoline-8-carboxylic acid, 8,9-didehydro-6-methyl- (8CI, 9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ergol-8-ene-8-carboxylic acid, 6-methyl- (7CI)

CN Indolo[4,3-fg]quinoline, ergoline-8-carboxylic acid deriv.

OTHER NAMES:

CN Δ8-Lysergic acid

CN 6-Methyl-Δ8-ergolene-8-carboxylic acid

CN 6-Methyl-8-carboxy-Δ8,9-ergolene

CN 6-Methylergol-8-ene-8-carboxylic acid

CN 8,9-Didehydro-9,10-dihydrolysergic acid

CN Paspalic acid

FS STEREOSEARCH

DR 13980-89-7, 5539-08-2, 607363-40-6

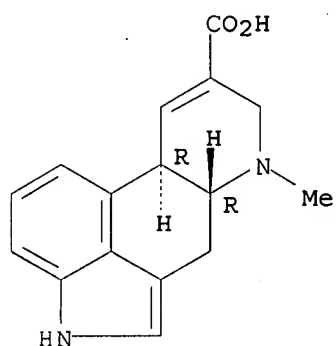
MF C16 H16 N2 O2

CI COM

LC STN Files: AGRICOLA, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, IFICDB, IFIPAT, IFIUDB, IPA, NAPRALERT, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)

10/589,768

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

24 REFERENCES IN FILE CA (1907 TO DATE)
24 REFERENCES IN FILE CAPLUS (1907 TO DATE)
8 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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